



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE MODERN WORLD-ORDER AND THE ORIGINAL NATURE OF MAN.¹

DANIEL BELL LEARY.

I

"WE shall be able," wrote Descartes, "to find an art, by which, knowing the force and action of fire, water, air, stars, the heavens and all other objects, as clearly as we know the various trades of our artisans, we may be able to employ them in the same way for their appropriate uses and to make ourselves the masters and possessors of nature. And this will not be solely for the pleasure of enjoying with ease and by ingenious devices all the good things of the world, but principally for the preservation and improvement of all human health, which is both the foundation of all other goods and the means of strengthening and quickening the spirit itself." We have come to know the forces; we have, in a measure, mastered nature; but as for the rest of the program, we have, I contend, fallen far short. The modern world-order is but partial order; it is mere external tidiness; "The best is yet to be, The last of life for which the first was made."

¹ A selected bibliography, covering the field of this brief essay, falls into three parts. First, those references applying biology or psychology to the problems of the individual and the group; Tead, O., *Instincts in Industry*; Wallas, G., *The Great Society*, and *Human Nature in Politics*; Lippmann, W., *Drift and Mastery*, and *A Preface to Politics*; Trotter, W., *Instincts of the Herd in Peace and War*; Veblen, T., *The Instinct of Workmanship*, and *Theory of the Leisure Class*; Thorndike, E. L., *Educational Psychology* (particularly Vol. I.); McDougall, W., *Social Psychology*; Marot, H., *The Creative Impulse in Industry*; Metchnikoff, E., *The Nature of Man*, and *The Prolongation of Life*; Parker, C., *The Casual Laborer*; Watson, J. B., *Psychology from the Standpoint of a Behaviorist*; Loeb, J., *The Mechanistic Conception of Life*; Cory, H. E., *The Intellectuals and the Wage Workers*; Paul, E. and C., *Creative Revolution*; Russell, B., *Why Men Fight*, and *Proposed Roads to Freedom*; Walling, W. E., *Larger Aspects of Socialism*; Barnes, H. E., *Psychology and History*; Goldenweiser, A. A., *History, Psychology and Culture*; Bernard, L.L., *Transition to an Objective System of Social Control*; Woodworth, R. S., *Dynamic Psychology*; Pillsbury, W. B.,

This quotation from Descartes exemplifies an ever-recurring reaction to the world and the society in which men have lived and toiled; it is but one example of the constant swing from one extreme to another. Two fundamentally different syntheses, two radically opposed generalizations, have had, at different times, the allegiance of men and women,—one, the romantic, mystical protest against nature and the world-order, and the other the scientific, classical, severely cold, intellectual jubilee. They overlap, they are seldom “pure,” they contend, they rise and fall in relative strength and appeal, but each still speaks for supremacy. At the present moment, there is little doubt, the scientific attitude, the love for facts, the reverence for classification and description has the upper hand; we live in an age of science. Salvation is to be found in knowledge, here and now; the senses are supreme, particularly if they have had, in their investigations, the aid of instruments of precision. Romanticism and mysticism have had too little to show compared with the wonders of science; nor have their claims led to the same pragmatic *control* of affairs; science can *do*, whereas non-science may merely *feel*, and make vague promises for the future.

Psychology of Nationality and Internationalism; Partridge, G. E., *The Psychology of Nations*; Schneider, H. W., *Science and Social Progress*; Baldwin, J. M., *Darwin and the Humanities*; Conklin, E. G., *Heredity and Environment in the Development of Men*; Paton, S., *Human Behavior*; Martin, E. D., *The Behavior of Crowds*; Hayes, E. C., *Sociology and Ethics*; and many others.

A second group, of more philosophical nature, includes: Perry, R. B., *The Present Conflict of Ideals*, and *Present Philosophical Tendencies*; Holt, E. B., *The Freudian Wish*, and *The Concept of Consciousness*; Spaulding, E. G., *The New Rationalism*; Holt, Marvin, etc., *The New Realism*; Dewey, Moore, etc., *Creative Intelligence*; Mackenzie, J. S., *Elements of Constructive Philosophy*; and many other titles in the field of the newer realism.

The third group is more definitely Freudian, but in the wider sense: White, W. A., *Foundations of Psychiatry*; Rank and Sachs, *Significance of Psychoanalysis for the Mental Sciences*; Freud, S., *Totem and Taboo*; Abraham, K., *Dreams and Myths, a Study in Race Psychology*; Adler, A., *Study of Organ Inferiority and Its Psychological Compensation*; Bradby, M. K., *The Logic of the Unconscious Mind*; White, W. A., *Thoughts of a Psychiatrist on the War and After*; Kempf, E. J., *The Autonomic Functions and the Personality*; and many others, particularly in the field of abnormal psychology.

But the vision of Descartes has been forgotten; science has indeed fulfilled its promise of control, but the purpose of that control has been lost sight of in the tremendous complexity of the wonders that have been laid bare. Man and nature have been divorced, and science has become, instead of the servant of man, his veritable taskmaster; human values are sacrificed to the ideal of "impersonal knowledge"; Man has become a recording device in the service of the environment. Even where science has apparently concerned itself with human values it has done so in what may properly be called an "inhuman," *i.e.*, an impersonal, way. Medical science, for example, has lengthened, tremendously, the span of life; has made it possible, by virtue of the control of disease, the disposal of waste and sewage, the elimination of birth-dangers, the discovery of antiseptics and vaccines, to live a healthier and a longer life. But the problem of Descartes is still thereby untouched; life is not, merely in virtue of its length, thereby valuable, enjoyable, desirable. Not yet has science intimately concerned itself with the *quality* of existence, with those inner sanctions which make life worth while, or with the outer conditions which would bring them about.

II

The present, then, is the era of science, of the fact valued as a fact, of interpretation and description in terms of quantity, organization, relationships. "It is commonly held," writes Veblen in *The Place of Science in Modern Civilization*, "that modern Christendom is superior to any and all other systems of civilized life. Other ages and other cultural regions are by contrast spoken of as lower, or more archaic, or less mature. The claim is, that the modern culture is superior on the whole, not that it is the best or highest in all respects and at every point. It has, in fact, not an all-round superiority, but a superiority within a closely limited range of intellectual activities, while outside this range many other civilizations surpass that of the modern occidental peoples. . . . The modern

civilized peoples are in a peculiar degree capable of an impersonal, dispassionate insight into the material facts with which mankind has to deal." Science has become the court of appeal;—facts, it would seem, are indisputable.

The sincere inquirer, however, is perturbed at finding that the court of appeal,—science,—has not been quite as disinterested, as dispassionate, as broad and as thorough as first impressions and the propaganda of the partisans would indicate. The world of reason has indeed been quite thoroughly surveyed; the world of men, the province, so-called, of psychology, has yielded, too, its quota of facts; but the facts connecting them, the facts of the full, active, creative and living being are, as yet, less valued, less known, less investigated. "Other ages and other cultural regions" are indeed held to be lower, yet the estimate is based primarily on just the absence of such a system of facts; and it never occurs to anyone except, perhaps, the speculative reader and student of history, to compare the living values in terms of concrete returns to human beings associated in significant work one with another of, say, 500 B. C. and 1920. We confessedly have no art comparable with previous art; our literature is not to be ranked with that of many previous periods, nor our architecture, nor our music, nor our dress, nor, perhaps, our entire summed-up reaction to the universe as a home and a scene of adventure and progress.

Yet when we survey the social fabric that has inherited the conception of science and reason as the ideal and the goal of human activity, we are a bit at a loss to account for the quite evident turmoil and disintegration of that fabric. If science is the sum and substance of the task and province of man; if man is, by nature, training, historical inheritance and present choice, first and foremost a scientist, a surveyor of the world in terms of quantities and their group relationships, how comes it then, that he finds himself in such a strange and unsatisfactory world as even a casual survey of civilization to-day, shows us? Is science, in the light of the evidence, historical and contemporary, to be in any

sense held responsible; either directly, as the immediate cause and occasion of the existing unsatisfactory and indeed intolerable conditions, or indirectly, in that attention to matters too purely descriptive and scientific has led human activity and human devotion on a false and unfruitful path? This is indeed a shibboleth; and as we answer we show our allegiance. From the point of view here being developed the answer is emphatically "Yes" in both senses; science has both directly precipitated the present in that it has made possible much of the recent barbarous "scientific" war, with its resultant train of evils, and indirectly, in that it has consistently, until recently, refused to consider, as worthy of scientific notice, the problem of human life in its essentially human aspects. In the world of descriptive formulæ, in the huge accumulation of facts as the reason apprehends them, man and his world have disappeared.

III

Who are the present "saviours" of the universe? Who are they, who, dissatisfied with a pre-eminently rational and factual world-order, have thrown off their allegiance to it and set out, in olden style, to create another world,— one more germane to their natures and aspirations, their desires and their purposes? Surely not the scientists, not the logicians, not the adepts in pure reason, not the collectors of facts, not those who have most laboriously striven to add yet one more generalization to the already incredible number which we have. We find rather our present saviours among the non-scientific, among the perhaps too radically emotional, among those who swear by "intuition," revelation, tradition, any and every principle but the principle of sufficient reason and the accumulated facts to support it. We need but to read such things as the *Communist Manifesto* of Marx, or his contributions to the papers of his period, the present utterances of Lenine and his followers, who carry on the same strain of thought and endeavor, the *Preamble* of the I. W. W., Sorel's *Reflections on Violence*, the writings of Loria, Pouget, Bakunine, and so on in an endless succession.

It is here, strangely enough, that we find little or no attention to facts as facts—no fact of society or of history is so refractory that these enthusiasts cannot wrest from it the meaning and the doctrine they wish, and which they have, often, conceived before the facts were woven to support it, and it is here, too, that we find the most determined attempt to direct the universe, the real universe of man; the attempt, motivated with the strongest of human energies to “remould it nearer to the heart’s desire.” It is a strange condition of affairs, but one hardly to be criticized in the light of the development of science and the world of reason with the attendant neglect of the world of human affairs.

Some significant quotations, here, should be of interest. “. . . the final causes of all social changes and political revolutions are to be sought, not in men’s brains, not in better insight into eternal truth and justice, but in changes in the modes of production and exchange, not in the *philosophy*, but in the *economics* of each particular epoch” (Engels). “It is not beliefs and ideas in general that constitute a factor in history, but only the special beliefs and ideas of the proprietary class. Beliefs and ideas were present in the hearts and minds of the slaves, the serfs and the wage-earners, but these beliefs and ideas have not had the least effect upon the march of history, for they have always been repressed by the beliefs and ideas of the patricians, the feudal lords and the capitalists” (Loria). One is well justified in wondering, in the light both of these quotations and the recent and contemporary action in terms of the ideas they present, whether the future will be as emphatically characterized by reason and science as the immediate past and present, or whether the conscious and bitter disappointment they depict will spread so far that a new world-order will be constituted. It is no idle question; history, it will be remembered, is but a swaying of values and emphases, and here is no mere wordy dissatisfaction of a rival science, of a competing metaphysics, but the cry of human beings in action, hunting in a pack what they have been as yet unable to get. To them the modern world-order is no order; to

them other passions than the passion for knowledge and facts exists, to them no far-off millennium suffices to still the insistent inner desire for more and better life. Man, to be sure, is at times reasonable; but to think does not exhaust his activity, nor name all his functions.

If we seek for the philosophy of this reaction we find it, at its best perhaps, in Bergson, though Sorel too has many general principles in his *Reflections*. "Intelligence," writes Bergson, "applies itself to all things, but it remains outside them." "Philosophizing just consists in placing one's self, by an effort of intuition, in the interior of concrete reality." "Instinct . . . is a faculty of utilizing and constructing organized instruments. Intelligence is the faculty of constructing and utilizing unorganized instruments." While this, in itself, reflects the present protest against the results and the methods of pure thought and reason, it is rather the application of the protest in the concrete field of human endeavors that is significant of the possible changes in human surroundings and the present world-order. Sorel, in his *Reflections on Violence*, makes the application; and it is worth a sober and serious comparison with the methods and technique of science; a comparison that takes account, however, not only of "facts" but of emotions, purposes, ideals, whole-hearted activities. ". . . the general strike," he writes, "is indeed what I have said, *i.e.*, a body of images capable of invoking instinctively all the sentiments which correspond to the different manifestations of the war undertaken by socialism against modern society. Strikes have engendered in the proletariat the noblest, the deepest and the most moving sentiments that they possess; . . . We thus obtain that intuition of socialism which language cannot give us with perfect clearness — and we obtain it as a whole, perceived instantaneously." What can we say of all this? To call it mere nonsense does not do away with it even as a mere "fact" for investigation; to call it emotional does not do away with the additional "fact" that emotions have a cause, and often, too, an uncanny way of "working themselves

out" into action in support of or in congruence with them; to call it "unreasonable" is as useless; the fact persists and needs better consideration. The general conclusion is clear; in the minds of the adherents of these doctrines, or in their hearts, if you prefer the phrase, the promise of science has not been fulfilled, the world has not become even approximately as the "vision of fulfilled desire" conceived it, and since science has not made the promised reconstruction, the conclusion is drawn that it cannot.

IV

The world of reason is, indeed, a curious world; quantity, relationship of one quantity to another, an external description of concatenated events, a world with neither First Cause, nor Final End, a world entirely necessary, and from the beginning quite definitely to be as it now actually is, and with every event of the future quite as definitely a necessary sequent to the present total situation and the events which will, also necessarily, come in between; a world where success and failure are determined in advance, but where, curiously enough, the element of striving and loafing is a determined part of the determined sum total,—a world, in short, that is not at all the world which naïve inspection and lifelong unphilosophical experience declare it to be. A world of reason, but in another sense a very unreasonable place! Yet on what has such a conclusion been based; what is the nature of the evidence which has shown our universe to be so emphatically and undoubtedly a most undesirable home for human activity,—where yet that human activity is a seemingly necessary part of the whole? Nowhere has science *found* a real cause, nowhere has she definitely and unmistakably *shown* the necessary connection between even two events;—science has only description to show, to point to proudly as the sum and substance of the centuries of work and organization; a description, to be sure, which enables us to find our way about in the manifold details and intricacies of the universe and its many perplexities, but which, far from being a final and irrevocable revelation of the nature of

the universe, is but a guidebook to its curiosities and its points of interest and value. It is, in a sense, a huge card catalogue of the things which one should know before undertaking a serious project; things one should *know*, to be sure, but the knowledge of which does not in any sense exhaust the full meaning of a project undertaken. The "facts," then, of science are not at issue, and are indeed among the most valuable of the inheritances of the present era, but in the facts, search as we will, we do not find the man.

With the facts then we have no quarrel; though, as is apparent, they are not quite as immutable as it would sometimes appear, nor is the present less characterized by changes in the "facts" than previous eras. We need not, to carry this to extreme, assert that the facts are as we make them, as we designedly find them; the present argument, it will be remembered, is not epistemological; it takes for granted as a theory of knowledge, that we *do* know things as they are, or at least *can* so know them, though that knowledge may grow more complete from time to time; it is sufficient to realize that we do find them very often different to-day and to-morrow, for more important and fundamental issues of our argument are involved. Science is, in the main, at least in its earlier stages in any given field of activity, analytical rather than synthetic or constructive, and in so being has, undesignedly perhaps, but none the less thoroughly investigated and described not the Universe as a whole, but selected portions thereof, neglecting many areas, until but recently, and some even to the present moment. Yet the world does not seemingly function as such a mere conglomeration of associated but uncoordinated parts, but as a whole, and the investigation which draws conclusions about the sum total from an examination of parts, is either false in its conclusions, or must establish the verity of the principle whereby it may judge of all from a part. Knowledge of a *this* plus a *that* plus a *something else*, however accurate our knowledge of each, in so far as it really is such separate knowledge, tells us nothing of their coöperative meaning and associated activity. This particular habit of separate

investigations, with resultant accumulations of facts in separate departments of research, is emphatically open to question in the special separation of man and nature. As science and reason would have it, Nature is a field for investigation by Man, both Man and Nature being conceived though not always directly and overtly stated as separate, and separably subject to investigation. Man and Nature, as stated in an earlier section, are viewed as partners in a seemingly transitory sense, not at all as merely opposite aspects of an inseparable and evolved and constantly transforming unity, each aspect of which has both contributed and received modifications in the course of their mutual and differential evolution. However true the facts, the observations and the relationships of fact to fact obtained on such a basis; however accurately they depict certain aspects of the universe,—the mathematical or quantitative, say,—they miss the *whole* quality and significance of the world we live in in as decisive, if not momentous a way as the acknowledged inefficient and *unscientific* thought of primitive man. Facts are valuable facts only in relation to an observer, a human being, and when stripped of all such human reference and made, as it were, “facts in themselves,” they become ipso facto, devoid of meaning, until again brought into human relationship via some given human purpose, some plan, some intention which, while using the fact, colors it with things quite other than the merely descriptive and numerical characteristics of the world of pure reason. In the mind of a human being with a purpose ahead of him, facts become “humanized” and quite other than “facts in themselves,” and it is in this wider sense of the word facts that science may yet come to be the actual creator of the promised world of the earlier period; but much more reinterpretation and much more reorganization lies between than is roughly indicated above.

But this method of isolation and consequent loss of human value has led to even graver consequences in the division of the nature of the human being himself into a so-called “knowing” or intellectual ability plus an emotional

activity plus sundry other abilities and capacities or aspects of being, and then ranking as of first and prime importance the results and the products of the "knowing" faculty. This knowing faculty, so it would seem, in the light of the edicts of the world of reason, is the one and only action or ability of a human being which gives as a result knowledge of the universe; all else is "subjective," transitory, unsatisfactory, temporary, personal, and mingled with error and falsehood. When we can measure, describe, and in a wholly external and objective way be conscious of an object, then and only then do we truly know it; such at least is the statement of the followers of the world of reason. But let our emotions, our wishes, desires or impulses enter into an investigation: let an effort to ascertain the truth become confused with traces of such things, and the result is,—nothing; nothing, at least, in the eyes of science and the world of reason. Yet when we survey the course of the evolution of man from the lower animals, we find no place at which there has been a definite creation of intellect: rather a gradual growth in the complexity of both structure and function, where increased complexity of structure has been accompanied by a correlated growth of complexity in behavior, so that we can, very properly, doubt that worms, say, exhibit much in the way of syllogistic reasoning, but are quite at a loss to show when and where a definite beginning was made in intellectual forms of behavior toward the universe. Intellect, that is, is rather a result, a gradual accumulation of many other kinds of behavior, with a corresponding parallel increase in the delicacy and retentiveness of nerve tissue; with the result that in man, as a late product of evolutionary development, the process is so complex that we call it thinking, and endow him with a "mind." But all life has conduct, of one sort or another; all life makes some adjustments, has some sensitivity, and we can hardly deny to such life that, in some sense, and a very fundamental sense at that, it "knows" the universe. It reacts, it accomplishes purposes, it survives, it perishes, it propagates,—and in a less complex and detailed way, in a less descriptive and concep-

tual sense, it has "knowledge." We can hardly go back to the days of Descartes and call all but human beings mere automatons, mere machines. On any such basis of reasoning we would need include the thinking human being also;—nor to be sure, has science been found unwilling to this. When we smell a rose, when we handle it, when we buy it to decorate our own or someone else's person, do we not know it; or is our knowledge of it exhausted by a description of it in terms of light vibrations, the molecular weight of its component parts, the formula of its perfume, the weight it has as an individual specimen? Does reacting to it as an object of beauty, as something that we think gives us "hay fever," as something that expresses our love or devotion,—does none of this have any significance in the world of human affairs, and is none of this *knowledge*, because it is so intimate, so personal, so transitory, so mingled with the human and the social?

To sum up, then, and avoiding the very evident metaphysical implications which bristle throughout all the foregoing, we must realize with increasing clearness that we are become, through age-long inheritance, beings of a highly complex nature, with many "action patterns," many types of conduct, of which the intellectual is but one, and that life and living is not "for" any particular one of them, but, on the contrary, they are all "for" life and living. We do not live in order to think, nor yet to express emotions; rather we think, if we can, in order to live, to preserve the life we have not asked for, and we react emotionally for the same wise "reason," perhaps, though the reason is an afterthought. Science we shall always need; there is no solution for the present situation in terms of *unscience*, superstition, or a purely primitive emotional and wishful attitude toward an unknown and feared world; but the new science must be humanistic in its clearly visioned purpose of reconstruction. There must be no sitting by the wayside of knowledge to merely gaze in wide-eyed wonder at the findings of human research, but careful haste to evaluate and apply them to human problems. MacIver, in writing of an associated

problem, says, "Science provides the means, but we badly need enlightenment as to the ends they serve. Science shows the road to productivity, but productivity for what? If by our social indifference and lack of direction we increase productivity by means which degrade the producer, what good is that to society? . . . Productivity is justified only by the welfare it makes actual."

V

The present has seen or is about to see a rediscovery of man and society. We are, as it were, astonished to find that man is so complex, so curious, so sensitive, so easily deranged, so readily misled,—and yet so easily understood, if we but give him, as man and as member of a group of human beings, the intensity and consistency of study that we have given to his environment. And the present rediscovery of man and society is a psychological one; man and his social aggregations are no longer described in terms of atoms, forces, physical and chemical formulæ, no mere phrase of "distributions of energy," or "increases in heterogeneity" will satisfy the inquirer or the investigator; man and his world, both individual and group, are explained and described in terms of feelings, thoughts, wishes, impulses, instincts, emotions, purposes, ideals, and a whole coterie of such qualitative concepts. The most trivial things, to a first attention or acquaintance, have seemingly had the most tremendous effects; not only in the life history of a given man, but in the longer history of a group or a large society; and we can readily see, in the light of our present knowledge, that this has always been so and perhaps always will be. We have become aware, in perhaps a more intimate way than was given to any previous age, of the drama of the individual life and its complex results when compounded with other such individual dramas in the tremendously complex interaction of many individuals in a group. Yet science has hitherto had little or nothing to say of all this; it is essentially not a matter of mere quantitative results or summaries; we do not know the nature of human

consciousness by stating the norm and the deviation therefrom; we know the nature of consciousness by its fruits and its co-ordinated activities.

The new man is the strange product of a disinterested scientific investigation with all the paraphernalia of instruments, laboratories and experiments; it is the product of science, however, and as usual, only in the descriptive sense, for no science as yet (if we exclude sociology and education as not coming within the province of science), has undertaken to use that knowledge for the rehabilitation of human values in a reconstructed world. Nor can this statement be made too often; for the tradition is still with us that in accurately describing a given subject of investigation, in plotting its relationships to other existing subjects of a similar type, and in giving also, perhaps, its evolutionary history, we have exhausted the investigation. It is rather the contention, here, often reiterated, that with the attainment of such a stage of knowledge, the investigation and the solving of the problem have but begun. What, then, has the laboratory brought forth? In a sense, a new Frankenstein; for it is just in terms of the new psychology that the whole quarrel has started, and it is in terms of the structure of the newly discovered man that we must answer the questions he and his ancestors have from time immemorial asked. It is in no new sense that man and men ask, What is the purpose of life? How am I to fill my days? What is my relation to my neighbor and to the community? These are age-old questions, and they have been answered with age-old sophistries, with words that have, at times cleverly, and at times clumsily turned the edge of the questions. But this time, in the light of the new knowledge of man and his nature, we can, if we will, answer with truth and exactness. And our answer, if it be honest, reverses many of the old answers, and we find man, not knowledge, man in his dynamic activity, to be the heart of the universe; a universe which has no meaning except with reference to man and his nature, for "meaning" is a human term.

What, then, is the nature of man? Again we cannot follow out in all the ramifications and technical details the new story of the new man; a brief summary must suffice. A man is both a repository of past racial and biological activities and experiences, an accumulator and organizer of new experiences on such a basis, and finally, a dynamic instrument of reaction in the light of purposes and desires, some of which he has also inherited and some of which are the product of his personal span of existence and consciousness. The first element, the racial and biological, results in certain propensities to act thus and so in a given situation; that is, given a situation in the environment, man will, apart from training and personal experience, tend to act in a given manner. This, in the young child, is relatively simple, but the course of personal experience and growth often complicates, without destroying the original element, such primitive modes of response. Emotions, instinctive activities, reflexes, are such types of conduct, and it needs but a very little unbiased observation of self or neighbor to form a very wholesome estimate of both the power and the variety as well as the frequency of action based in whole or in part on such inherited bases. The second element, the accumulated and organized elements of experience, again offers a fertile field for observation and experiment; how much of what, as adults, we do and desire to do, is based on very early, and perhaps forgotten experiences, complicated, it may be, by the first, more fundamental element of racial inheritance?

But the third element, projected dynamic action, on the bases of both personal and inherited possibilities, must needs be emphasized as much, if not more, than the other two, for man does not act merely or always, or perhaps even oftenest, "from the past," on the basis of the past, just as past, but from a purpose, visioned in the future, from a dissatisfaction with the present, and from a perception that, with the materials both of his own nature and the external environment, of which he is so vital and intimate a part, he may reconstruct, reorganize, and bring about that situation

which will more nearly satisfy the desires and purposes which flow through him. His efforts are, to be sure, conditioned by that past, limited in many directions, unlimited perhaps in others, but effort and the consequent results soon show both the limits and the free fields of open possibilities.

The whole man, then, the "new" man, in the psychologic meaning of the term, is no mere seeker after knowledge,—nor happiness either for that matter,—but an immensely complicated system of reactions, a psycho-physical instrument, directing its efforts and energies to the attainment of purposes, some remote, some near, some simple and some complex, succeeding and complicating one another in an infinitely varied way, never, in a practical sense of the words, the same in a given individual, and never duplicating themselves in separate beings. To state the whole description of the previous paragraph from the inner or neurological point of view, we find that, at any given moment, certain of the systems of neurons associated with the mechanism and manifestation of a given action (be it instinctive, emotional, learned or what not), are "ready to act"; they are physiologically and biologically in a state of well being, they are well fed and, as it were, on a hair-trigger. Under such conditions, if the environment offers the proper stimulus for the inherent response of the nerve group in question, it "goes off," we perform the action in question, we function as our nature has been ready and poised to act,—and the result is biological and psychological satisfaction and well-being so far as that portion of the whole system is concerned. When we are hungry, when our digestive system is ready for food, when we, in common terms, and with no competing desires to complicate the situation, desire food,—to eat is pleasant, and not to do so is unpleasant;—and the terms pleasant and unpleasant have no further significance than the biological one already given. Pleasantness in a response implies the condition of readiness, and the condition of readiness implies the pleasantness for the subsequent response, and the union of the two will continue till the response is due not to a readiness of the neurons involved, but some external

condition of force or necessity. On the contrary, to eat from mere formality or social pressure, when the system is not ready to function in that way is unpleasant; and again the terms have, here, simply biological and neurological significance. It is the same for any other activity in which we indulge or are able, on the basis of heredity or experience and habit, to indulge in; to be awake when the system calls for sleep, to be forced to sleep or to pretend sleep when action is preferred, to sit when we desire action, to exercise when we are neurologically ready for rest, to restrain an emotion when we would, on the above basis, rather express or experience it, to be forced to show the external signs of sympathy when we feel none or its opposite, all these are but random and elementary examples of the facts involved in the activities of human beings in their daily lives, and would, in each case, involve the biological unpleasantness which we have described above. Other similar elements of biological significance enter into the full explanation of the well being of man's inherited and acquired system of reactions, purposes and desires, but such details do not concern us here.

It is in the application of these principles to the field of ordinary everyday life that their significance becomes apparent, and the glaring defects of our social system become clear. A number of books treating of just this biological and psychological error in our social structure have recently appeared, and their number is constantly increasing. And it is noteworthy that philosophy and psychology, in the instances of many recent contributions, seem to share to a considerable extent both the field of their research and discussion, as well as the methods they use and the conclusions to which they come; indeed, it is difficult at times to say whether a given text is primarily a psychology or a philosophy or even a sociology. They constitute a partial bibliography for the present article. (See note on first page of this article.)

Examples illustrating the statements of the last paragraph are not difficult to find. To name, specifically, only a few

of the instincts or innate capacities for acting or wanting to act in a certain way, when the stimulus is offered, or wanting to so act through inner readiness even when the external stimulus or situation is lacking, we find, among others, the following: the instinct of gregariousness, the herd or group tendency; the instinct of curiosity, the tendency or desire to manipulate, examine,—to make; its close associate, the tendency to be mentally active, to think, to ruminate; to be kind, to act as a parent, to be motherly, fatherly, in an unsophisticated sense of the terms; to acquire, possess and own, to collect; to hunt; to be afraid; to be angry, to fight; to be a leader and to dominate; to show off, to be vain; to follow and be subordinate; to revolt at physical confinement, compulsion or force; to be sexual, to be attracted by the other sex; as well as more complicated abilities and capacities, partly native and partly learned, which do not concern us here. Even the above, to be sure, simple as they may appear, are perhaps to be later analyzed into still simpler and more primitive “responses” to “situations,” due to the nature of the organism and its organization.

On the basis of the argument presented, which is in turn founded on the objective evidence of the laboratory work in psychology so recently done, it is quite evident that social and industrial life, as at present organized, most emphatically does not offer adequate opportunity for the exercise of these mechanisms, nor for the resultant well-being of the individual. For example, many of our men and women can never, under present conditions, become parents, nor even in the absence of that satisfy the instinct of sex, at one and the same time one of the most primitive, one of the most imperious and one of the most repressed in our social structure. And it is to be noted that, whether rightly or wrongly, the present Freudian analysis holds that much social inefficiency as well as downright abnormality and non-social action on the part of individuals is due to a mis-functioning or lack of functioning of this and associated mechanisms. Nor can an instinct of workmanship be used in the monotonous, simplified, uninteresting work of many

of our industrial workers; the strike, at least, is their own creation, and in addition to offering satisfaction to still other mechanisms, also gives some exercise to the instinct of workmanship, leadership and self-assertion. So with the rest; one and all, as responses of the normal human being they do not find the appropriate stimulæ in the world of present-day conditions; we all, whatever our social position, whatever our place in the present complexities of civilization, find ourselves balked, time and time again, and in every given direction, by a taboo and a restraint which has grown up under the influence of a one-sided emphasis on certain human abilities and certain human products. The world of reason and the products of science do not offer, in any sense of the words, an outlet or a stimulus for the normal, complete functioning of the normal complete human being; they satisfy but one mechanism,—the capacity, and the desire to manipulate, to examine, to think. But it will hardly be asserted by even the most ardent defender of the present world-order that it is given to all of us, or even to any considerable part of the present social body, here or in Europe, to think in a purely or emphatically constructive and professional sense, in a new or productive direction and hence to find in such activity a wholly satisfying outlet for all the inherited proclivities and abilities. We who have, in any sense of the words, preserved, even approximately, our normal capacities and abilities and who still function as approximate wholes, can only give praise and thanks to the relatively rich and generous environment in which we have grown up.

It is always a matter of proportions. Contrast with the normal state of a normal human being such pictures as Parker presents in his analysis of the *Casual* (unskilled) *Laborer*. "The powerful forces of the working class environment which thwart and balk instinct expressions are suggested in the phrases monotonous work, dirty work, simplified work, mechanized work, the servile place of labor, insecure tenure of the job, hire and fire, winter unemployment, the ever found union of the poor district with the

crime district. . . . If we postulate some sixteen odd unit psychic characters which are present under the laborer's dirty blouse and insistently demand the same gratification that is with painful care planned for the college student, in just what kind of perverted compensations must a laborer indulge to make endurable his existence? A Western hobo tries in a more or less frenzied way to compensate for a general all-embracing thwarting of his nature by a wonderful concentration of sublimation activities on the wander instinct. . . . The balked laborer here follows one of the two described lines of conduct: First, either weakens, becomes inefficient, drifts away, loses interest in the quality of his work, drinks, deserts his family; or, secondly, he indulges in a true type-inferiority compensation and in order to dignify himself, to eliminate for himself his inferiority in his own eyes, he strikes or brings on a strike, he commits violence or he stays on the job and injures machinery. . . . His condition is one of mental stress and unfocused psychic unrest, and could in all accuracy be called a definite industrial psychosis. He is neither wilful nor responsible, he is suffering from a stereotyped mental disease." A rather serious yet ludicrous culmination of an age which long ago promised so much, and promised it in the name of all humanity, and to the end of physical and spiritual well-being; and a rather serious indictment of the science that knows so much and can do, in a human sense, so little!

VI

What, then, can be done; and on what basis; and to what end? What can be done is to change the environment which confronts the human being from his birth to his death, the social environment, that is; for it is in it rather than in the fabled "Nature," red in tooth and claw, that we live as human beings; the basis is the new knowledge of human nature; the end, the realization of the old promise of science and the world of reason. In no uncertain sense psychology is the present "science of the sciences"; born, to be sure, of an older science, imbued with its methods, but rich in a new

knowledge that can turn the older knowledge that produced it to human and wholly human ends. But though the end is clear, the means for attaining it are not, though several steps in such a reconstruction may be briefly indicated. Parker writes, with the same problem in mind, "The dynamic psychology of to-day describes the present civilization as a repressive environment. For a great number of its inhabitants, a sufficient self-expression is denied. There is for those who care to see, a deep and growing unrest and pessimism. . . . If we are to play a part in the social readjustment immediately ahead, we must put human nature and human motives into our basic hypotheses. Our value concept must be the yardstick to measure just how fully things and institutions contribute to a full psychological life. We must know more of the meaning of progress. . . ."

The first step would seem to be an even more complete analysis and understanding of the fundamental characteristics of human beings, as individuals and as groups, together with an accurate understanding of what situations call forth the responses which have been thus ascertained, and an estimation of the present environmental and social conditions favoring such responses or inhibiting them. This would be but the crude material, the *sine qua non* of a reconstructive period; we need, as has often been said, a criterion of progress, a goal to which to work, as well as a principle by which to organize our efforts. But this again, by the very nature of the case, and on the basis of the argument which has been constantly advanced here, must be a concept made up of human characteristics, of generalizations about human nature, of opportunities and openings related to the human nature which so ardently desires to "progress," and which has sought such devious ways to do so. We can, to retain the level of the present discussion, and to avoid the necessity of purely academic arguments and issues, refer to the often quoted maxim, "the greatest good for the greatest number," and suggest that it be understood to mean "the completest functioning, biological and psychological, for

each human being consistent with the same functioning for every other, and the consequent modification of the social environment to so permit." This, while vague enough, at least gives real content to the phrase of the older maxim, "the greatest good," for in the latter the "good" is quite undefined, whereas in the biological and psychological senses of the term it is quite apparent, as has been shown, what is "good" and what is "not good." It is, moreover, also quite apparent that it is no longer a matter of an a priori sketch of what is possible for the individual to do, what is permissible for the single unit to respond to and to express, but rather has become a problem, subject to control, of trying our various situations, and seeing the actual results. We need not dogmatize, we need not lay down "reasonable" rules, we need but experiment and see, and do so in a broader and more social sense than we have ever done before. In his *Proposed Roads to Freedom*, Russell depicts just such choices, such bases for trial and experiment, such new states of associated living as have not been tried, and we stand to gain or lose by adherence to or by avoidance of this sort of flexibility in our societal evolution. Science and history, for example, may give us the facts about the growth and the present state of property, marriage or what not; psychology can and does give us the facts as to the relation of property and original human nature; but nothing but experiment can tell us what fundamental changes in the present system would do for the individual and the group. Such experiments are being made; in the light, perhaps, of knowledge and research and a study of human nature, in Russia, though a study of the present evidence would indicate, rather, that the present experiment there is more in the nature of a tremendous psychic reaction to intolerable conditions than a carefully thought-out program of social experimentation, carefully watched and jealously evaluated; a most excellent and telling example of just what repression and lack of psychological and biological freedom and health will result in, when the repressive barriers are removed or weakened. Russia is emphatically an example of the con-

tentions of the present paper, as even a brief consideration of her social and cultural history shows. So we need, as has been said several times, careful experiments and watchful manipulation of social and human activities, in the method but not with the aloofness and bias of science rather than a mystic and emotional, perhaps hysterical swamping of all that the present age has inherited and so carefully developed and increased. That the present situation of man in society is intolerable to all but a chosen few is apparent; that it will change, and that a different society with different values and emphases will appear is as inevitable as the end of the individual life and the succession of a new quota of individuals with some of our prejudices and some of our ideals; *how* it will change, and *to what* it will change are problems that demand our most whole-hearted interest and activity, for on us depends part at least of the resultant civilization, part at least of the coming revised schedule of interests and methods, institutions and freedoms.

Another element in any reconstruction is candid self-examination; a weighing of our social and societal fitness and worthiness; a determination of what we as individuals are doing and have done to hinder or help the development and functioning of other human beings, in our respective positions of social, economic or professional power and influence; of what we are prepared to do, as individuals and as associated members of active groups, to investigate, report, experiment, and venture; what we are prepared to lose that others, ourselves included, may gain. It is particularly as teachers that we can function for the reconstruction of society, for the coming of the essentially human society, where repression will be at a minimum, and where the emphasis will be on creative activity, biological and psychological self-expression, tempered only by the equally biological and psychological desire for companionship of equal nature; for the class-room offers, in spite even of "courses of study," unequalled opportunity for the development of whole-human-beings, with its selected environment, its minimization of the severer consequences of error, and

its possibilities for experimentation. Educational theory has come near to being the fundamental social and philosophical theory of the recent years, for the inherent problem of education is just the problem of the present paper, and no problem more closely touches the welfare of the individual or the group than the problem of the meaning and the conduct of life.

Still another element is a pooling of interests on the part of the many separate sciences, and the adoption, consciously and explicitly, of an essentially human point of view, human in that it overtly recognizes that knowledge and knowing represent but partial and infrequent activities of human beings; and human in that it recognizes Nature as a portion of Man, and that results obtained and measurements made in the former are, in the last analysis, of value only in the light of immediate or remote use on behalf of human beings; human in that it directs attention not merely to the quantitative aspects of both human nature and the human environment, but that it recognizes also the qualitative elements of existence. One can well imagine a huge Committee of Social Welfare and Progress, to which all significant material and all new discoveries would be, as a matter of course, forwarded, and where, in the light of the respective member's reaction, representing every and all scientific and social interests, the essential meaning and value for present social and human plans would be extracted, and situations and conditions adjusted to meet them, to make them actual. Such a social clearing house has been a dream in many periods of history; such, perhaps, will be the outcome of the present social dissatisfaction, which has resulted in the criticism and the destruction, in part, at least, of every institution; such would be, indeed, a vindication of science and the accumulated results of its years of research in the world of reason; but a vindication that will be won only on the basis of a consideration of the *human significance of knowledge* which the immediate past has not shown.

DANIEL BELL LEARY.

UNIVERSITY OF BUFFALO.